

**UNIVERSITY OF CALIFORNIA, DAVIS
AUDIT AND MANAGEMENT ADVISORY SERVICES**

**Contracts and Grants Accounting
Effort Reporting/Cost Sharing**

Audit and Management Advisory Services Project #16-08

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Effort Reporting / Cost Sharing Audit and Management Advisory Services Project #16-08

MANAGEMENT SUMMARY

BACKGROUND

Effort reporting is the method of certifying to the federal granting agencies that the effort required as a condition of the award has actually been completed. Effort reporting is required by OMB Circular A-21 which requires certification of effort spent by all employees whose salaries are charged directly to federal and federal flow-through funds, as well as for reporting committed cost sharing.¹ To meet these requirements, University of California, Davis (UC Davis) employees must certify their actual effort provided to the award project on an annual basis through the Effort Reporting System (ERS).

Cost sharing means that a portion of project or program costs is not paid by the funding agency. It includes *all* contributions, including cash and in-kind, that a recipient makes to an award. On a periodic basis, the Principal Investigator (PI) of the award must certify and report to the sponsor the total accumulated cost share contributions in support of their commitment. The total cost share contributions and reports are generated through the Cost Share Tracking System (CSTS).

Contracts and Grants Accounting (CGA) provides central oversight over the effort reporting and the cost share commitment activity and is responsible for training the campus community on the systems used to certify effort and record cost sharing.

The background above describes required activities that support compliance with regulations and award conditions. In addition to required cost share, we have voluntary uncommitted cost share that is intentionally not identified in any of our electronic systems. This can be in the form of effort or department resources provided to the project that is not paid by the sponsor nor identified as a commitment on the award document.

PURPOSE AND SCOPE

As part of the fiscal year 2015-16 audit plan, Audit and Management Advisory Services (AMAS) included a review of effort reporting and cost share activities. The initial objectives of this review were to:

- Assess the effort reporting and cost sharing commitment responsibilities performed by the departments;
- Assess the data relied on by CGA that establishes and completes our compliance requirements; and
- Evaluate how well the university is meeting its compliance reporting requirements.

To meet our objectives we interviewed CGA Management, a PI with cost share commitments, and department coordinators. We conducted a survey of PIs and coordinators to help us gauge their perception of the systems and other related issues. We performed a comparison analysis on data housed in the three related systems; Effort Commitment System (ECS), CSTS and ERS, and reviewed a sample of 10 awards that closed within FY 2015 and that included required cost share as part the award.

In addition, we analyzed the financial impact of certain types of cost sharing to the university. Specifically, we evaluated the funding sources of ladder rank faculty in order to determine how much of their salaries are funded through sponsored funding sources (research funds)², general funds, or other funding types; we evaluated cost share captured in the CSTS, and we evaluated the cost share policy and guidelines. To perform this analysis, we relied on payroll and cost share transactions recorded for FY 2015.

¹ CGA website: "What is Effort Reporting?"

² Our analysis was based on Decision Support FIS 349 funding source designations. Sponsored funding sources would be equivalent to the "Research" funding source group in the FIS 349 report. See "End Notes" for further detail on this group.

CONCLUSION

Overall, UC Davis is meeting its compliance reporting requirements. Based on our system analysis, we confirmed that the internal mechanisms that promote timely effort certifications have been successful, reaching a 99.9% certification rate. Based on our review of the sample of awards that were completed during FY 2015, we confirmed that CGA is generally fulfilling its obligation in reporting cost share to sponsors.

An opportunity for improvement exists regarding providing more accurate data in support of management decisions, as CSTS data relied on by CGA and other campus managers is not complete nor accurate. We recommended revising CSTS to include input fields for calculated costs that are not in the CSTS, and performing periodic quality reviews of the award cost share attributes and activities. CGA has agreed to work toward revising the CSTS to allow more complete data to be captured, and to provide quality control over its data input. CGA has also agreed to target higher risk awards in order to provide support to the PIs and coordinators who have cost share commitments and responsibilities.

We found that 10% of ladder rank faculty academic year payroll expenses for FY 2015 were charged to research funds within the six schools/colleges/divisions engaging in scientific research.³ By comparison, 29% of total expenditures in these units were charged to research funds. We calculated that approximately \$2.1 million in university funds could be freed-up annually for each percentage point increase in ladder rank payroll charges to research awards. Budget and Institutional Analysis (BIA) has agreed to obtain benchmarking information in order to begin an informed conversation with executive management on this topic.

We found that the university provided \$11.3 million in mandatory and committed cost sharing in FY 2015. Of this total, \$5.0 million was from general funds.

Of the PIs who responded to our survey, almost 50% indicated that that they at least sometimes reduce their sponsor paid effort from what was agreed to at the time of the award, while still providing the same level of effort on the award, which results in cost sharing. Many cited that this practice is necessary in order for their labs to remain competitive.

³ Includes School of Medicine; Agricultural and Environmental Sciences; Engineering; Math & Physical Sciences; Veterinary Medicine; and Biological Sciences.

I. OBSERVATIONS, RECOMMENDATIONS, AND MANAGEMENT CORRECTIVE ACTIONS

A. Cost Share Impacts and Opportunities

1. Ladder Rank Faculty Funding Sources

In FY2015, 10% of academic year payroll expenses for ladder rank faculty within scientific research-driven schools/colleges/divisions were charged to research funds. By comparison, 29% of total expenditures in these schools/colleges/divisions were charged to research funds.

We accumulated payroll expense distribution by funding source for ladder rank faculty within the following schools/colleges/divisions in FY2015.⁴ As presented in the table below, of approximately \$210 million in total payroll expenses, 10% was charged to research awards. Of the remaining 90%, 75% was charged to general funds and 15% to other fund sources.

Chart A- Ladder Rank (LR) Pay Structure by School, College or Division

School/College/Division	Count of Paid LR	Total Empl Pay	% of Total	General Funds	% of Total Pay	Research	% of Total Pay	All Other	% of Total Pay
MEDICINE	248	58,722,000	28%	18,741,000	32%	11,342,000	19%	28,639,000	49%
AG & ENVIR SCIENCES	275	49,206,000	23%	43,259,000	88%	4,485,000	9%	1,462,000	3%
ENGINEERING	194	31,121,000	15%	28,855,000	93%	1,695,000	5%	571,000	2%
MATH & PHYSICAL SCIENCES	162	26,762,000	13%	26,157,000	98%	493,000	2%	112,000	0%
VETERINARY MEDICINE	123	24,823,000	12%	21,519,000	87%	2,188,000	9%	1,116,000	4%
BIOLOGICAL SCIENCES	114	19,395,000	9%	18,086,000	93%	1,059,000	5%	250,000	1%
Grand Total	1,116	210,029,000	100%	156,617,000	75%	21,262,000	10%	32,150,000	15%

The charts in Appendix A present a further breakdown by department within each unit.

Additionally, for each of these units, we compared the percentage of ladder rank payroll expenses charged to research awards with the percentage of total expenses charged to research awards. We also calculated how much each unit would free-up in university funds for every 1% increase in ladder rank compensation charged to research awards. This analysis is shown in the table below.

Unit	% of LR Payroll Expenses Charged to Research	% of Total Expenses Charged to Research	\$ Impact for every 1% Increase in LR Salary Charges to Research
Medicine	19%	21%	\$587,000
Ag & Environmental Sciences	9%	42%	\$492,000
Veterinary Medicine	9%	27%	\$248,000
Biological Sciences	5%	38%	\$194,000
Engineering	5%	42%	\$311,000
Math & Physical Sciences	2%	27%	\$268,000
Total	10%	29%	\$2,100,000

⁴ Based on KFS Labor Transaction data for FY 2015. At the direction of Accounting & Financial Services, our analysis excluded summer salaries. Summer salary is not part of the 100% FTE pay structure of the academic employee if the individual has a 9 or 11 month appointment paid over 12 months. Removing the summer salary pay component allowed a review of the funding sources that comprise the 100% FTE for the ladder rank employees. (See End Notes for further details).

Finally, we noted that, while there is a university requirement that PIs record some level of effort on research awards, there is no requirement for PIs to charge a minimum portion of their payroll expenses on research awards. That minimum effort may in fact be all cost shared and therefore not paid by the sponsor.

Recommendations

See recommendations under observation I.A.2 below.

2. Cost Share Provided in Support of Research

In FY15, the University provided approximately \$11.3 million in cost sharing. Of this total, \$5.0 million (44%) came from general funds.

The *UC Davis Guide to Research Compliance* defines the three types of cost sharing as follows:

- *Mandatory cost sharing.* Costs that the university must contribute toward the project in order for an award to be made.
- *Voluntary committed cost sharing.* Costs associated with a project and identified in the proposal, for which funding is not being requested from the sponsor.
- *Voluntary uncommitted cost sharing.* Voluntary uncommitted cost sharing is any cost associated with a project and not funded by the sponsor, which has not been identified in the proposal, or in any other communication to the sponsor as a commitment of the university.

UC Davis strongly discourages cost sharing unless such a commitment is required by the sponsor.⁵

Mandatory and Voluntary Committed Cost Sharing

CSTS indicates that in FY15, the university provided approximately \$11.3 million in total cost sharing. The ability to distinguish mandatory cost sharing from voluntary committed cost sharing is not currently present within CSTS, as this information is not added manually or fed electronically from the Sponsored Programs systems.

Approximately \$7.7 million (68%) was flagged in CSTS as “mandatory reporting” [to the sponsor] while \$3.6 million (32%) was flagged as “reporting not required” [to the sponsor]. Quali Financial System (KFS) UC Fund codes suggest \$2.4 million (67%) of the “reporting not required” amount was provided from general funds. To the extent that some of these expenditures could have been charged directly to these research awards rather than cost shared, a portion of this \$3.6 million would have been available to fund and support other university initiatives.

According to the Uniform Guidance, voluntary committed cost sharing cannot be used as a factor during the merit review of proposals. In our PI survey, 70% were not aware of this Uniform Guidance stipulation. Furthermore, 64% of the PIs indicated they believe that at least sometimes the sponsors will still consider voluntary cost sharing when evaluating proposals. Consistent with that response, 40% indicated that they at least sometimes include voluntary committed cost sharing in their proposals to increase the chances of the proposals being funded.

⁵ PPM 330-31- Administration of Contract and Grant Projects, and *UC Davis Guide to Research Compliance*, p.21

Voluntary Uncommitted Cost Sharing

Because of voluntary uncommitted cost sharing, university funds that could be used to support other initiatives are instead being used to pay for project costs even though there is no obligation to do so. This type of cost sharing is intentionally not tracked, so the associated opportunity cost to the university cannot be quantified.

PI Survey

Almost 50% of the PIs we surveyed indicated that they at least sometimes reduce their paid effort from what was agreed to at the time of the award, while still providing the same level of effort on the award (which results in cost sharing). Regarding the degree of reduction, 20 PIs indicated a range between 2-5%; 30 PIs indicated a range of 5-10%; and 20 PIs indicated a range of 10-25%.

Many commented that they do this to fund students and post docs in order to make their labs competitive.

Recommendations

1. Compile metrics regarding faculty salaries such as those presented throughout this report for inclusion on a dashboard for Executive Management.
2. Benchmark UC Davis faculty salary metrics against those of peer institutions including other UCs. If the UC Davis 10% ladder rank pay funded by research lags behind peer institutions, consider taking actions such as the following:
 - Establishing a Blue Ribbon Committee to evaluate opportunities to move general funds supported voluntary cost sharing to research or other funding sources.
 - Establishing a requirement to charge a minimum of percentage PI payroll expenses to every award.
 - Incentives to reward PIs who charge their payroll expenses to research awards.
 - Strategic communications to PIs about voluntary uncommitted cost sharing, including impact to the University. Consider partnering with Office of Research to include discussion topics as part of their training series.
3. Evaluate the ability to enhance the CSTS to not only allow the flagging of cost share for CGA reporting responsibilities, but to also include the ability to designate the cost share commitment as either mandatory or voluntary committed per award document, or voluntary committed per minimum effort guidelines.

Management Corrective Actions

- A. By March 15, 2017, BIA will compile metrics regarding faculty salaries such as those presented throughout this report for inclusion on a dashboard for Executive Management.
- B. BIA will also benchmark UC Davis faculty salary metrics against those of peer institutions including other UCs by March 15, 2017.

- C. If the UC Davis 10% ladder rank pay funded by research lags behind peer institutions, the Provost will consider actions such as the following, by March 15, 2017.
- Establishing a Blue Ribbon Committee to evaluate opportunities to move general funds supported voluntary cost sharing to research or other funding sources.
 - Establishing a requirement to charge a minimum of percentage PI payroll expenses to every award.
 - Incentives to reward PIs who charge their payroll expenses to research awards.
 - Strategic communications to PIs about voluntary uncommitted cost sharing, including impact to the University. Consider partnering with Office of Research to include discussion topics as part of their training series.
- D. CGA will enhance CSTS to include the designation of cost share as identified in the proposal document, or as cost share to meet PPM 330-31- Administration of Contract; section III.D guidelines, by March 15, 2017.

B. Contracts and Grants Accounting Information Systems

Effort Reporting and Cost Share Systems

As outlined in the Contracts & Grants Manual section 5- 999; *University Implementation*, CGA is responsible for mechanisms to identify and maintain documentation of committed cost sharing which ensure that: 1) proper effort reporting is accurately captured; 2) cost sharing commitments are fulfilled; and 3) the total annual value of cost sharing delivered is reported and used in the preparation of the campus Facilities and Administrative (F&A) rate proposal.

UC Davis implemented the ERS⁶ which ensures effort reports reflect actual paid effort, and in addition have also developed internal processes to ensure the timely certification and completeness of the effort reporting population on the annual reporting cycle. The appropriateness of the effort certified on the effort reports, however, correctly falls to the responsibility of the PI.

In addition, the ECS and CSTS are supplemental systems that help CGA fulfill their responsibilities. The ECS is designed to help identify and establish appropriate levels of effort available for key personnel, including both direct and cost shared effort, so that monitoring of total individual effort can be performed. If effort in this system is designated as cost shared it will feed into the CSTS to be used by department coordinators in the recording of cost share provisions, also called contributions. The CSTS will feed indicators of cost shared effort into the ERS to be reviewed and certified by the PI during their certification process. In the cost share process, CGA acts as a conduit between the PI who has cost share commitments and the sponsor, by providing total cost share contributions to the sponsor. CGA has limited responsibility to ensure the cost share is appropriate. This responsibility primarily falls to the PI with support by the department coordinators.

⁶ Developed through UC campus collaboration and implemented at UC Davis in 2007.

The CSTS also provides cost share data needed in the calculation process for negotiated F&A rate. A one year snapshot of cost share provisions is drawn from the CSTS system, and assigned into appropriate cost pools as part of this process.

Cost share processes

CGA is responsible for setting up the award fund in the financial system, which also includes entering the overall cost share commitment into the CSTS. Departments are responsible for identifying financial and payroll transactions that qualify to meet the cost share commitment.

CGA is then responsible for reporting the total cost share contributions to the sponsors. To do this, CGA requests Cost Share Contribution Reports (generated from the CSTS) from PIs. These reports are generated, reviewed, signed by the PI, and forwarded to CGA who assess them for reasonableness and then reports the cost share totals to the sponsor. Failure to fulfill the cost sharing obligation may result in the reduction of the amount of the sponsor's award.

1. Certified Effort and Cost Share Effort Inconsistencies

Certified effort reports may be inconsistent with cost shared effort reported to sponsors. For one award we reviewed, this discrepancy was \$1.1 million, although according to the PI, the amount reported to the sponsor was correct.

Cost shared payroll transactions are fed from the CSTS to the ERS. Cost shared effort must then be certified in ERS. We found that some PIs eliminated the CSTS-fed percentages in ERS. This practice resulted in discrepancies with the cost shared effort reported to the sponsor, as PIs certified that no effort was performed. These conflicting records could present a problem if awards are audited.

For the last annual effort reporting cycle ended September 30, 2015, we identified 22 employees who had eliminated their cost shared effort on their effort reports; nine of the 22 were faculty members contributing effort on one award. For this award, the elimination of cost shared effort on the associated effort reports totaled approximately \$1.1 million in associated payroll costs.

The PI indicated that the Cost Share Contribution report, i.e., the amount reported to the sponsor, was correct. The following issues may have contributed to the discrepancy:

Processes and Activities during the Effort Report Certification

- The interface between the CSTS and the ERS provides cost share information into the effort report that allows the certifier to be aware that there is cost share effort to consider. Occasionally, this information results in effort reports showing total effort greater than 100% effort. In such cases, PIs must manually reduce their cost sharing, and inadvertent errors may result in the elimination of cost shared effort.
- People may have forgotten that their effort actually contributed to the cost shared award.
- Cost share and effort reporting department coordinators are designated to be the support staff with knowledge on how the effort reports work in conjunction with the cost shared effort on the awards of their PIs. The coordinators are responsible for aiding PIs in understanding these reports and communicating important information during the effort certification processes. Difficulties may arise when coordinators leave departments and their replacements lack the experience and knowledge on how the cost sharing affects the effort report awards. Difficulties may also arise when cost shared PIs and other employees move to a new department where the coordinator may not have knowledge about the cost shared commitment.

System Deficiency

- When a PI manually adjusts cost share in ERS, CSTS is not automatically adjusted, which results in discrepancies between the systems.

Recommendations

1. Revise the effort reports for the 22 people identified.
2. We do not propose upgrades to the ERS/CSTS interface, as the cost to do so may outweigh the benefit. This issue affects a relative few (less than 2%) who must certify effort reports, and could be effectively handled through the following activities:
 - a. CGA should develop a plan to support department coordinators and PIs with large cost share commitments, to enable them to be knowledgeable about their responsibilities during the effort certification process relating to cost sharing activities.
 - b. CGA should perform on a routine basis monitoring activities for cost shared effort that has been eliminated in effort reports, including communicating with PIs.

Management Corrective Actions

- A. CGA will work with the 22 persons identified with eliminated cost shared effort, to revise their effort reports, if needed, by September 15, 2016.
- B. CGA will develop a plan to support the department coordinators and PIs with large cost share commitments by February 15, 2017.
- C. CGA will perform periodic monitoring of effort reports during the certification period to identify those with eliminated cost shared effort. The first monitoring activities will be completed by March 15, 2017.

2. System and Processing Deficiencies**Deficiencies in CSTS and a lack of quality control prevent the system from providing complete or accurate information that can be relied on by management.**

We identified 165 awards that closed in FY 2015 and included mandatory or committed cost share as part of the award. We sampled 10 of the awards and determined that the commitment was met on all of them. However, the information in CSTS did not capture, in most cases, the true commitment for the awards, nor what was reported as cost share to the sponsor. For the 10 awards sampled, discrepancies were identified as follows:

- The CSTS had cost share commitments overstated by \$12.5 million.
- Total contributions recorded in CSTS for sponsor reporting were understated by \$1.3 million, which included:
 - Unrecovered indirect costs of \$934,129 were not in CSTS,
 - In-kind expenses of \$158,084 were not in CSTS
 - Transactional contributions of \$310,986 were not in CSTS due to a system implementation decision in FY 2011⁷,
 - \$121,580 in excess cost share that was not reported to the sponsor was in CSTS.
- In addition, two awards with mandatory cost share were not reported by CGA to the sponsors, but instead the reporting responsibility was left to the department.

⁷ Although the CSTS was first implemented in 2004, the Quali Labor Ledger implementation in 2011 did not allow the feed of payroll expenses to CSTS causing a break in information fed to the system. This was resolved in FY 2013, and departments were allowed to decide to go forward with new cost share, or import the missing cost share for 2011-2013. This resulted in some cost share for the period between 2011 and 2013 residing outside of CSTS.

For these two awards, there was missing cost share provisions in CSTS in support of total contributions (\$158,084 in-kind included in totals above), but we also noted that the department reported more cost share to the sponsor than what was required for these two awards (\$95,355).

We learned the following operational and system issues contributed to the discrepancies:

- The cost share commitments are not always updated in CSTS by CGA Analysts to reflect new amendments or modifications to the award. These award changes may increase or decrease our cost share obligations.
- To record the contributions in CSTS, the system either pulls transactional data from the financial or payroll systems, or allows coordinators to input 3rd party contributions directly into an input field. There are no other input fields for contributions that do not originate in one of the two systems, such as the calculated unrecovered indirect costs, or calculated in-kind expenses.
- For the two awards where the reporting of cost share to sponsors resided with the department, the reported cost share was based on calculated in-kind expenses. Although the cost share reporting was required, CGA did not have any available method to capture or assess these calculated costs, so the department was allowed to report to the sponsor.

Recommendations

With the possible implementation of the Kuali Cost Share module estimated to be at about three years out, we do not recommend extensive overhauls to the CSTS system. We suggest they continue to evaluate the Kuali module as a better tool to capture cost share activity. In the meantime, we do recommend the following actions be performed to allow the CSTS to provide more accurate cost share information in support of management decisions:

1. CGA Analysts should revise the cost share commitments when amendments and modifications impact our cost share commitments.
2. The CSTS should be modified to allow input fields for the calculated unrecovered indirect costs, and for other calculated expenses.
3. All awards with required cost share should be included in the CSTS, and reported by CGA to the sponsors.

Management Corrective Actions

- A. CGA will implement a quality assurance review of total commitments entered in the CSTS by February 15, 2017.
- B. By March 15, 2017, the CSTS will be modified to include additional input fields for recording unrecovered indirect costs and other CGA-approved cost share that can't currently be captured in the system.
- C. CGA will require all awards with required cost share to be included within the CSTS, and will perform the reporting of cost share to the sponsors by March 15, 2017.

C. Survey Results Summary (Actual survey responses provided to CGA)

PI's Survey

We surveyed 999 PIs that certified effort reports for the Federal Fiscal Year 2015 that also included some cost share activity. 191 PIs (19%) completed the survey.

The respondents were fairly confident that they certify their effort to within +/- 5% of their actual effort, but many comments identified their frustration with this process. Only 50% of the respondents were knowledgeable about not including their voluntary uncommitted effort on their certified effort reports. Other significant responses were included previously in this report.

Administrative Coordinator Survey

We surveyed Administrative Coordinators who were identified with awards that included mandatory cost sharing as an element of the award. In total, 71 invitations were sent and 31 respondents (44%) completed the survey. We asked 11 questions relating to their activities using ECS, CSTS and ERS.

We found that the ECS is not used consistently to monitor PI effort or to feed cost share effort into the CSTS system. The coordinators responded they would not consistently go back to the ECS to revise the effort, if the effort was changed in the CSTS or on the certified effort report. When asked if the ECS was meeting their needs, the weighted averages resulted in a neutral opinion that indicates the system is not truly meeting their needs.

We learned that only 11.5% of the respondents make corrections to the CSTS Contribution Reports to include calculated waived indirect costs, and less than half (46%) would confirm 3rd party contributions prior to reporting to the sponsor. 70% of the respondents selected they would go back to CSTS and make changes to the effort, if the effort was changed during the effort report certification process. As far as the CSTS meeting the needs of the administrative coordinators, again the weighted averages resulted in a neutral opinion, which indicates the CSTS is not meeting the needs of the respondents.

Finally, we asked if the training resources were adequate to help with their responsibilities relating to these activities, and overall the web resources were rated more adequate than the training tools and courses. However, they all were within +/- .15% of a neutral opinion, suggesting resources could be enhanced to better support the administrative users of these systems.

Recommendations

Training and communication activities should be enhanced to provide better support to the PI's and the Administrative Coordinators in support of their effort reporting and cost share activities. CGA should consider some of the comments provided in the survey to identify opportunities to target areas of need.

Management Corrective Actions

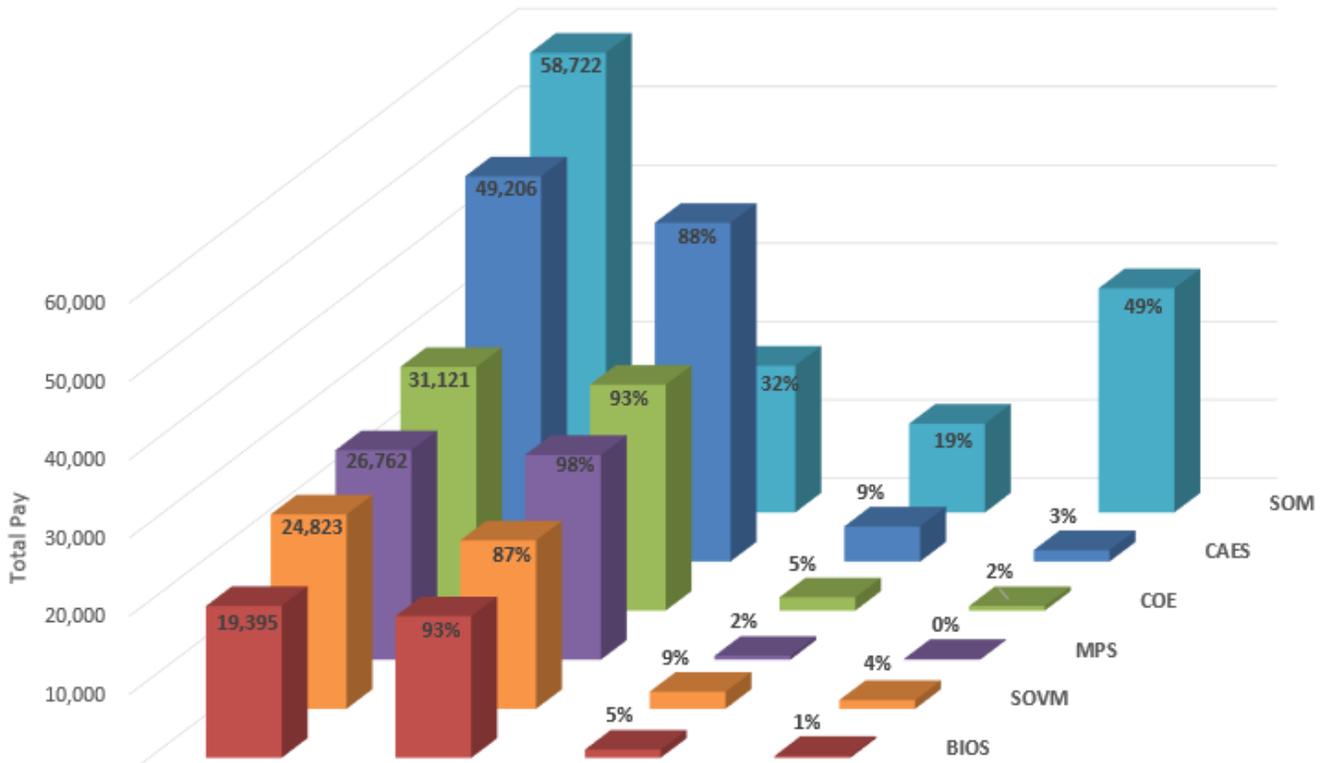
CGA will consider the comments provided in the survey responses, to identify opportunities to enhance some of their current training materials to better meet the needs of the campus PIs and Coordinators. This evaluation will be completed by September 15, 2016.

APPENDIX

Exhibit A: Ladder Rank Faculty Pay Structure by School/College/Division ⁱ

In \$1,000s

Ladder Rank - Academic Year Salary- FY 2015



	Total Pay	General Funds	Research	All Other
■ BIOS	19,395	18,086	1,059	250
■ SOVM	24,823	21,519	2,188	1,116
■ MPS	26,762	26,157	493	112
■ COE	31,121	28,855	1,695	571
■ CAES	49,206	43,259	4,485	1,462
■ SOM	58,722	18,741	11,342	28,639

Exhibit B: Ladder Rank Faculty by Department ⁸

DIV OF MATHEMATICAL & PHYSICAL SCIENCES	Count of Paid LR	Total Empl Pay	% of Total	General Funds	% of Total Pay	Research	% of Total Pay	All Other	% of Total Pay
MATHEMATICS	45	7,364,000	28%	7,202,000	98%	113,000	2%	49,000	1%
PHYSICS	42	7,174,000	27%	6,998,000	98%	147,000	2%	29,000	0%
CHEMISTRY	38	6,600,000	25%	6,361,000	96%	234,000	4%	5,000	0%
EARTH AND PLANETARY SCIENCES	18	3,158,000	12%	3,158,000	100%	-	0%	-	0%
STATISTICS	19	2,466,000	9%	2,438,000	99%	-	0%	28,000	1%
DIV OF MPS Total	162	26,762,000	100%	26,157,000	98%	493,000	2%	112,000	0%
Total Division Expenditures FIS 349		81,625,000		48,091,000		22,093,000		11,442,000	
Fund Type Expenses as a % of Total		100.0%		58.9%		27.1%		14.0%	

COLLEGE OF ENGINEERING	Count of Paid LR	Total Empl Pay	% of Total	General Funds	% of Total Pay	Research	% of Total Pay	All Other	% of Total Pay
MECHANICAL & AEROSPACE ENGR	37	5,783,000	19%	5,272,000	91%	278,000	5%	233,000	4%
ELECT & COMP ENGR	32	5,607,000	18%	5,374,000	96%	220,000	4%	13,000	0%
CIVIL & ENVIRONMENTAL ENGR	34	5,331,000	17%	4,981,000	93%	333,000	6%	18,000	0%
ENGR COMPUTER SCIENCE	29	4,897,000	16%	4,675,000	95%	221,000	5%	-	0%
CHEMICAL ENGR & MATERIAL SCI	25	4,630,000	15%	4,296,000	93%	270,000	6%	64,000	1%
BIOMEDICAL ENGINEERING	23	4,239,000	14%	3,663,000	86%	373,000	9%	202,000	5%
BIOLOGICAL & AG ENGINEERING	13	548,000	2%	548,000	100%	-	0%	-	0%
ENGINEERING DEANS OFFICE	1	86,000	0%	46,000	53%	-	0%	40,000	47%
COLLEGE OF ENGINEERING Total	194	31,121,000	100%	28,855,000	93%	1,695,000	5%	571,000	2%
Total College Expenditures FIS 349		107,651,000		51,559,000		41,027,000		15,065,000	
Fund Type Expenses as a % of Total		100.0%		37.1%		42.0%		20.8%	

⁸ Rounded for presentation purposes.

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COLLEGE OF BIOLOGICAL SCIENCES	Count of Paid LR	% of		% of		% of		% of	
		Total Empl Pay	Total	General Funds	Total Pay	Research	Total Pay	All Other	Total Pay
EVOLUTION & ECOLOGY	24	4,589,000	24%	4,251,000	93%	182,000	4%	155,000	3%
NEURO PHYSIO & BEHAVIOR	29	4,588,000	24%	3,926,000	86%	643,000	14%	19,000	0%
MOLECULAR & CELLULAR BIO	29	4,419,000	23%	4,307,000	97%	104,000	2%	9,000	0%
MICROBIOLOGY & MOLEC GENETICS	16	3,069,000	16%	2,938,000	96%	66,000	2%	65,000	2%
PLANT BIOLOGY	16	2,730,000	14%	2,664,000	98%	65,000	2%	1,000	0%
COLLEGE OF BIO SCIENCES Total	114	19,395,000	100%	18,086,000	93%	1,059,000	5%	250,000	1%
Total College Expenditures FIS 349		95,803,000		40,232,000		36,021,000		19,550,000	
Fund Type Expenses as a % of Total		100.0%		42.0%		37.6%		20.4%	

SCHOOL OF VETERINARY MEDICINE	Count of Paid LR	% of		% of		% of		% of	
		Total Empl Pay	Total	General Funds	Total Pay	Research	Total Pay	All Other	Total Pay
VM: SURG/RAD SCIENCE	29	6,523,000	26%	5,710,000	88%	276,000	4%	537,000	8%
VM: MEDICINE & EPIDEMIOLOGY	30	6,226,000	25%	5,599,000	90%	525,000	8%	102,000	2%
VM: PATHOLOGY, MICRO, & IMMUN	22	4,132,000	17%	3,811,000	92%	296,000	7%	25,000	1%
VM: POPULATION HLTH & REPROD	18	3,491,000	14%	2,905,000	83%	206,000	6%	381,000	11%
VM: ANAT PHYSIO & CELL BIOLOGY	11	2,147,000	9%	1,742,000	81%	390,000	18%	15,000	1%
VM: MOLECULAR BIO SCIENCES	11	2,073,000	8%	1,555,000	75%	462,000	22%	55,000	3%
VM: DEANS OFFICE - CS	1	198,000	1%	198,000	100%	-	0%	-	0%
CA ANIMAL HLTH&FOOD SAFETY LA	1	33,000	0%	-	0%	33,000	100%	-	0%
SOVM Total	123	24,823,000	100%	21,519,000	87%	2,188,000	9%	1,116,000	4%
Total School Expenditures FIS 349		216,397,000		56,726,000		58,464,000		101,206,000	
Fund Type Expenses as a % of Total		100.0%		26.2%		27.0%		46.8%	

Effort Reporting/Cost Sharing

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COLLEGE OF AG & ENVIRONMENTAL SCIENCES	Count of Paid LR	% of Total		% of Total		% of Total		% of Total	
		Total Empl Pay	Total	General Funds	Total Pay	Research	Total Pay	All Other	Total Pay
PLANT SCIENCES	50	8,294,000	17%	7,252,000	87%	706,000	9%	336,000	4%
AG & RESOURCE ECONOMICS	25	5,537,000	11%	5,003,000	90%	521,000	9%	13,000	0%
ANIMAL SCIENCE	30	5,075,000	10%	4,148,000	82%	822,000	16%	105,000	2%
LAND AIR & WATER RESOURCES	26	4,689,000	10%	4,108,000	88%	427,000	9%	154,000	3%
HUMAN ECOLOGY	27	4,322,000	9%	3,958,000	92%	196,000	5%	169,000	4%
ENTOMOLOGY/NEMATOLOGY	21	4,272,000	9%	3,441,000	81%	480,000	11%	351,000	8%
ENVIRONMENTAL SCIENCE & POLIC	18	3,240,000	7%	2,928,000	90%	167,000	5%	146,000	4%
PLANT PATHOLOGY	16	3,015,000	6%	2,588,000	86%	260,000	9%	166,000	6%
FOOD SCIENCE & TECHNOLOGY	16	2,440,000	5%	2,281,000	93%	159,000	7%	-	0%
VITICULTURE & ENOLOGY	14	2,407,000	5%	2,296,000	95%	111,000	5%	-	0%
NUTRITION	11	1,925,000	4%	1,557,000	81%	344,000	18%	-	0%
ENVIRONMENTAL TOXICOLOGY	9	1,722,000	3%	1,561,000	91%	162,000	9%	-	0%
WILDLIFE & FISHERIES BIOLOGY	8	1,582,000	3%	1,497,000	95%	85,000	5%	-	0%
TEXTILES & CLOTHING	4	685,000	1%	641,000	94%	44,000	6%	-	0%
COLLEGE OF AG Total	275	49,206,000	100%	43,259,000	88%	4,485,000	9%	1,462,000	3%
Total College Expenditures FIS 349		261,102,000		96,976,000		109,793,000		54,334,000	
Fund Type Expenses as a % of Total		100.0%		37.1%		42.0%		20.8%	
Note: AES appointments payroll expense		16,417,329		12,703,176		2,781,735		932,418	

Effort Reporting/Cost Sharing

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SCHOOL OF MEDICINE	Count of Paid LR	Total Empl Pay	% of Total	General Funds	% of Total Pay	Research	% of Total Pay	All Other	% of Total Pay
MED: DIV OF INTERNAL MED	49	9,900,000	17%	3,037,000	31%	1,756,000	18%	5,108,000	52%
MED: GENERAL PEDIATRICS	17	4,108,000	7%	1,497,000	36%	570,000	14%	2,041,000	50%
MED: PUBLIC HEALTH SCIENCES	15	3,564,000	6%	941,000	26%	1,146,000	32%	1,477,000	41%
MED:PATHOLOGY & LAB MEDICINE	11	3,218,000	5%	780,000	24%	571,000	18%	1,866,000	58%
MED: SURGERY	7	2,984,000	5%	734,000	25%	164,000	5%	2,087,000	70%
MED: UROLOGY	7	2,868,000	5%	442,000	15%	472,000	16%	1,955,000	68%
MED: NEUROLOGY	13	2,854,000	5%	944,000	33%	656,000	23%	1,254,000	44%
MED: DIAGNOSTIC RADIOLOGY	11	2,692,000	5%	667,000	25%	33,000	1%	1,993,000	74%
MED:PSYCHIATRY & BEHAV SCI	11	2,654,000	5%	949,000	36%	656,000	25%	1,049,000	40%
MED: BIOCHEM & MOLECULAR MED	16	2,610,000	4%	1,212,000	46%	825,000	32%	573,000	22%
MED: FAM & COMM MEDICINE	9	2,564,000	4%	1,107,000	43%	-	0%	1,458,000	57%
MED:MEDICAL MICROBIOLOGY & IN	13	2,489,000	4%	1,116,000	45%	800,000	32%	573,000	23%
MED: OPHTHALMOLOGY	7	2,425,000	4%	631,000	26%	282,000	12%	1,512,000	62%
MED: PHARMACOLOGY	13	2,259,000	4%	815,000	36%	934,000	41%	509,000	23%
MED:CELL BIOLOGY & HUMAN ANA	10	2,004,000	3%	1,019,000	51%	262,000	13%	722,000	36%
MED: DERMATOLOGY	7	1,978,000	3%	501,000	25%	531,000	27%	946,000	48%
MED: EMERGENCY MEDICINE	4	1,307,000	2%	193,000	15%	468,000	36%	646,000	49%
MED:PHYSIOLOGY & MEMBRANE BI	9	1,291,000	2%	612,000	47%	373,000	29%	306,000	24%
MED: RADIATION ONCOLOGY	3	1,277,000	2%	264,000	21%	182,000	14%	831,000	65%
MED: ORTHOPEDIC SURGERY	3	1,096,000	2%	416,000	38%	142,000	13%	539,000	49%
MED: NEUROLOGICAL SURGERY	4	1,073,000	2%	336,000	31%	81,000	8%	657,000	61%
MED: OBSTETRICS & GYNECOLOGY	2	740,000	1%	231,000	31%	283,000	38%	226,000	31%
MED: VC/DEANS OFFICE	1	477,000	1%	57,000	12%	106,000	22%	314,000	66%
MED:ANESTH & PAIN MEDICINE	3	240,000	0%	240,000	100%	-	0%	-	0%
MED: PHYS MED & REHAB	1	35,000	0%	-	0%	35,000	100%	-	0%
VM: CTR COMPARATIVE MEDICINE	1	8,000	0%	-	0%	8,000	100%	-	0%
SOM PART TIME MAP	1	5,000	0%	-	0%	5,000	100%	-	0%
SCHOOL OF MEDICINE Total	248	58,722,000	100%	18,741,000	32%	11,342,000	19%	28,639,000	49%
Total School Expenditures FIS 349		642,206,000		56,593,000		133,431,000		452,182,000	
Fund Type Expenses as a % of Total		100.0%		8.8%		20.8%		70.4%	

END NOTES

ⁱ Based on KFS Labor Transaction pay for FY 2015.

Methodology relied on by AMAS to perform our analysis:

- Identified all employees with a ladder rank title appointment; Class Title Outline Code begins with "0"

TCI CTO OSC	CTO DESCRIPTION	Pay AMT
010	PROFESSORIAL - TENURE	152,766,000
011	PROFESSORIAL - NON-TENURE	12,921,000
012	PROFESSORIAL - RECALL	2,484,000
016	PROFESSORIAL - EMERITUS	3,000
Totals		168,174,000

- Obtained all School/College/Division pay for the employee for all additional title codes;
- Removed summer salary pay, ERNCD = 'OLC', 'SBY', 'SMN', 'ACA', 'ACM', 'ACR', 'AMN', 'DIF', 'SSC', 'SSG', 'SST'. All other earnings codes were included. For example, the earning code HBZ, was included resulting in \$2.3 million in the "All Other" sources group for the SOM.

Pay Type	Pay AMT
Non Summer Salary	210,028,000
Summer Salary	9,159,000
Totals	219,187,000

- Summarized pay to the home department associated with the employee by funding source.
 - "Research" - SUB_FUND_GROUP_TYPE_CODE = 'B', 'C', 'D', 'F', 'H', 'J', 'L', 'N', 'P', 'S', 'V', 'W', 'X'
 - "Agency" - SUB_FUND_GROUP_TYPE_CODE = '1'
 - "General Funds" - SUB_FUND_GROUP_TYPE_CODE = '3', 'G'
 - "Gift Endows" - SUB_FUND_GROUP_TYPE_CODE= 'E', 'R', 'U'
 - "Indirect Opp. Funds" - SUB_FUND_GROUP_TYPE_CODE= 'K'
 - "Reserves" - SUB_FUND_GROUP_TYPE_CODE= '5', '7'
 - "Self-Supporting" - SUB_FUND_GROUP_TYPE_CODE=, '4', '6', 'A', 'M', 'Y'
 - "Student Fees" - SUB_FUND_GROUP_TYPE_CODE= 'T'
 - "Other"

<u>FIS 349 Research Funding Sources</u>			
B	Federal Appropriations	N	State Government FFT
C	Federal Contracts	P	Private Grants
D	State Appropriations (non C & G)	S	State Government
F	Federal Grants	V	Local Government FFT
H	State Appropriations - C & G	W	Private Grants FFT
J	Private Contracts	X	Private Contracts FFT
L	Local Government		

Total pay for the employee is confined to the School/College/Division and would match the expenses found in FIS 349 expense section for the School/College/Division.